Project:	OBOD Broadband Planning Project	**Workshop Date:**	November 1, 2012
Subject:	IPA Workshop East Region	**Time:**	10:00 A.M. EDT
		Place:	Kentucky River ADD Hazard KY

OBOD Project Team:

OBOD	KCADD	Baker	SNG
Brian Kiser	Abby Caldwell	Bob Lois	Derek Murphy
		Bill Bates	
		Wendall McCarty	

Project Area Working Group:
Mike Miller, Kentucky River ADD (Chair)
Abby Caldwell, KCADD
Eunice Holland, Kentucky River ADD
John Chester, Kentucky River ADD
Sandy Runyon, Big Sandy ADD
Joe Jacobs, Big Sandy ADD
Mike Patrick, Cumberland Valley ADD
Whitney Chestnut, Cumberland Valley ADD

Attendees: See "East Region IPA Sign-In Sheet.pdf"

Presentation Slides: See "KY OBOD IPA East Region Workshop Presentation 20121022.pdf"

Acronyms:
ADD = Kentucky Area Development District
Baker = Michael Baker Jr., Inc.
KCADD = Kentucky Council of Area Development Districts
OBOD = Kentucky Office of Broadband Outreach and Development
SNG = Strategic Networks Group
SOW = Scope of Work

The workshop convened at 10 a.m. Brian Kiser introduced the project team members and working group members before asking attendees to introduce themselves around the room (see sign-in sheet for details). Kiser then provided a brief history of the inception of the Commonwealth Office of Broadband Outreach & Development, including its mission statement, goals, and current involvement in presenting to legislative bodies.

Kiser explained that the purpose of the plans is to identify and engage stakeholders, identify the needs for the region, and engage providers. At this juncture, he wanted to put the power in the hands of the ADDs and regional stakeholders identified by them to allow them to determine what goals and steps are needed and feasible for the region.

Mike Miller then presented the East Region Working Group's Scope of Work (SOW) document. Miller explained that in looking at the data for the area, it became clear that there was a great opportunity to address utilization among local governments. The group determined that by driving e-solutions in the governments, they will not only be catering to the younger population (which the region is losing, according to Baker's data), but they will also be increasing education to their communities on the benefits of broadband. There is a hope that this will drive demand and therefore availability that could result in reversal of the population loss in the areas. Some

examples of e-processes that are not currently available include payment of water/utility bills, car taxes, applications for permits, etc.

Bill Bates then provided some information relating to the project goals, including regional availability, changes in provider participation over the past two years, and data on users, usage, and uses.

Derek Murphy then presented information relating to the regional survey data from March 2012. Murphy then informed the group that the goals for the day's workshop would be creating a vision statement, goals, strategies for achieving those goals, action items, and other strategies for implementing the action plan.

Preliminary discussions included the need to define what services are currently available and what it would cost to administer training and software for those services. The group determined that a portal of some sort would be ideal. Other discussion included:

- An incentive must be identified for seniors if they are going to adopt.
- The area could be made more attractive to younger populations through solving access problems
- Public access is an issue for those who cannot get or cannot afford broadband in the home.
- Hot spots in downtown areas are a popular solution to public access problems and could be paired with the project in terms of a bank of computers at the local courthouses where the splash page took them to the e-services portal.

The group took a break for lunch and reconvened at 1 p.m. for two group discussions regarding solving the availability issue and addressing the e-services options.

KCADD (Abby Caldwell) E-Services Group Breakout Notes:

Some key discussions included:

- 1/3 of counties provide Cable TV
- 10% of counties provide gas/electric
- All counties are taking care of property tax, franchise, occupational taxes
- The end goal is online bill pay, access to records and court docs online.
- The ADD(s) could serve as a clearinghouse/portal for this.
- Any system addressed must make it easy for users, particularly in terms of eliminating multiple usernames and passwords.
- E-Gov in the City of Pikeville may be a model to examine.
- Ky.gov may also be a possible portal.

The following objectives were identified: 1. Assess the software options; 2. Design parameters and options (i.e. what does the site look like? How does it operate for the end user?)

Actions identified by Miller are: 1. Identify the product; 2. Meet with utility providers; 3. Meet with city councils, commissioners, courthouse officials; and 4. Put the program in place and take the pilot to the CVADD and BSADD.

The following people would need to be involved: 1. KRADD/KCADD as convener/facilitator; and 2. Potential benefitting agencies (water districts, counties, etc.). A representative from Senator Rand Paul's office suggested a community poll to determine the demand and the existing services available online.

Resources needed:

- A standard questionnaire for e-Gov inventory through community poll
- Assessment of what resources are needed after looking at vendors
- Determination of match required of fiscal courts to determine feasibility and sustainability

Kiser then thanked the group for their time and input and told them Baker would be working with the OBOD to create an action plan within the next few months for the group to evaluate in the spring of 2013.

<u>Baker (Bob Lois) Notes</u>:

<u>Opening Session</u>

1. TVS Cable (affiliated with Thacker-Grigsby) was the only provider present.
2. Mike Miller, Work Group Chair presented the Project Area SOW:
    - Priority – e-Gov.
    - Most local government offices lack internet applications.
    - There are also availability issues in specific counties as noted in SOW (Lee, Owsly, Magoffin, Martin and Jackson.
3. Mike confirmed with Derek that the biggest issue with e-Gov would be with seniors – Derek confirmed.
4. Sandy, Big Sandy ADD Rep, noted that communications with family (children) would be a carrot for seniors to utilize internet.

    Derek clarified that seniors are best enticed by providing interesting subject matter thru the internet rather than specific internet training.
5. There was a question as to the differences in service between fiber and fixed wireless.

    Fiber definitely better (Cadillac).

    Fixed wireless dependent on line of site, but easiest to build out.

    Good fixed wireless can deliver up to 10 mbps.

    Bill stressed local fixed wireless providers and continually improved technology.
6. An attendee expressed concern that even though the Project Area focus was e-Gov, access was still a major issue that needs to be dealt with if internet applications are to be successfully utilized.

    Noted he works with KY Teleworks and reliable access is an issue.

    Only Satellite and Fixed wireless have been barriers.

    Derek noted that at least 2 other Project Areas are focusing on availability and that the PA work results can be shared with all regions.

    Derek noted that access always comes up – sometimes when you make access a utilization focus, you are targeting the 20% who don't have it, rather than the 80% who do.
7. Abby noted that maybe we have dual focus.

    Maybe provide government facilities to provide access (Wi-Fi hotspots).

    Potential Wi-Fi hotspot issues, such as hours of availability, were noted.
8. Derek/Bill/Mike Miller agreed on both e-Gov and access for now, if there is energy and resources to do so.

Have dual working groups.

Noted access discussions with providers in other PAs on how local government can work with them to expand service areas; i.e. available vertical assets, etc.

Decided to continue with e-Gov and Access breakout sessions.

e-Gov Breakout Session (Derek Lead)

9. Mike Miller envisions including all Count Courthouses, Water/Sewer Districts, Sheriff's Offices and Court Clerks Offices.

10. Noted that all the municipalities provide water (and sewer?).

11. Mike Miller envisions providing on-line bill payment, court documents to residents.

12. Another attendee noted that it will be important to not lose sight of the fact that this whole thing will need to be managed – It is a life cycle that needs to be properly managed.

    ADDs will be the manager of the process. Maybe manage a General Portal to provide serves to residents.

    Portal could direct resident to various County/Municipality services, both on-line and manual services.

13. Abby noted there could be issue with multiple logins for various services – Single login for all services?

    This is a work group discussion for later.

14. A City Rep noted that some municipalities already have on-line service applications.

    His city uses e-Gov link (cloud based) for providing city services.

15. Suggestion that maybe the 1st step is an assessment of on-line platform, design parameters and option currently being utilized.

16. Brian noted that the State Kentucky.Gov resources could probably be used to setup and operate the website(s).

    Application development and implementation is typically free – Small transaction fee after implementation.

    Kentucky.Gov websites can be branded as preferred with County/Municipality look and feel.

17. One attendee asked if providing too much functionality one the portal may be too much for residents – Maybe just go with bill paying?

    Mike Miller noted the need to make it simple.

18. Derek asked where the leadership will come from.

19. Mike Miller defined the envisioned process:

    - Process Definition
    - Meet with Utility Providers
    - Present to County Courts, Municipalities, etc. for approvals

20. Working Group needed.

    Convener will be KRADD (representing 8 county Project Area).

    Other ADDs will be invited to attend meetings, but at a minimum will be kept informed.

    Effort maybe expanded outside KRADD later.

    Other WG member will be appropriate customers; i.e. utilities, counties, municipalities, court clerks, etc.

Will reach out and get those interested parties involved.

21. Resource needed?

    Develop plan and costs.

    Reach out for financial resources.

    Develop a proposal including Business Plan.

    Another resource needed to perform inventory of on-line platform, design parameters and option currently being utilized.

22. General Takeaways

    Utilize 2 Work Groups:

    - Bill Paying

    - Other expanded application (perform inventory – where are now? e.Gov? – Issues? – Options?).

      An attendee asked if we may be making a big assumption that folks will want and use this.

    - Should we get thoughts, buy in from constituents – What do they want?

    - Maybe come up with a survey, poll folks on what they want. Build priorities.

Baker (Wendall McCarty) Notes:

<u>Opening Session</u>   Attendees head count: 23

1. TVS Cable is only provider

   - David Thacker
   - Archie Everage

2. Mike, SOW is:

   a. e-gov't for accessing gov't services.

   b. Also focus on adoption.

3. Don't focus on trying to get seniors to use e-gov't, but focus on their communication with their families to get them interested in using the internet.

4. What about issues with fixed wireless and line of sight?

   a. Fixed wireless is increasing, with capital investment becoming smaller

   b. Satellite is usually last resort/last choice for BB service

   c. Don't expect fiber to rural homes, but it will likely be in schools and other gov't facilities.

5. Focus of work group area already decided, but accessibility should by a key to make area more attractive (as mentioned from the guy in the smallest county in focus area).

a. He uses satellite service, but businesses in the area don't want to use satellite or fixed wireless. They want wireline service.

6. Abby mentioned a focusing on a marriage of both options, accessibility and e-gov't, where courthouses and other gov't facilities could provide a hot spot for the town or area.

7. Mike mentioned accessibility should be part of the conversation, no matter what the focus is.

a. Providing e-gov't may lead to an increased need of accessibility.

<u>Accessibility Breakout Session (Bill Lead)</u>   Attendees head count: 9

8. Altius is available is eastern edge of state near state line.

9. Crystal Broadband is available in the area (Lee County and Jackson down to Haddix). They have fiber and coax.

10. TVS Cable:

    a. Building fiber at about 50 homes per mile

    b. Buying bandwidth from ATT

    c. They pass about 17,000 homes

11. What can we do, as businesses and the public, to help Providers?

    a. Get Providers information on :

        i.   Population density

        ii. How permitting and the gov't works

        iii. Public/Private Partnerships

        iv. Vertical assets

12. TVS mentioned that getting this information is the hardest to get many times.

13. Who is in best position in each area with head-end points?

14. ATT has kept some Providers out of some Counties.

15. TVS in using grants.

16. RUS is challenging to work with.

17. Other funds will be available and we can look into and forward to everyone.

18. Get Providers paired with entities (state parks, gov't facilities etc.) that have Broadband.

19. Create partnerships with companies. Someone has a pipe, and another has access.

20. Get institutions (state parks, gov't facilities) on map to provide and pair up to/with Providers.

21. Find out what are the capacities of these institutions.

22. Providers need to know customer penetration and take rates.

23. Coal industry in the region is having cutbacks and layoffs right now. This will affect take rates.

24. Online business is big in Rosa Coach's area (Hwy 141, Saul, Perry Co.). She uses hot spots for BB service.

25. We need to get Wi-Fi hot spot locations on the map. Get inventory.

26. Are hot spots a viable solution? This can help a lot, but transportation to these hot spots can be an issue.

27. How does a Provider's revenue with 1-2 large business customers compare to Provider having many household customers?

    a. Providing to 1-2 businesses is as viable as providing to many households.

28. Need to get inventory of customers in an area, so Providers can decide whether to install broadband to that area.

29. Price of installing fiber has gone down and should continue to go down.

30. Providers are focused on keeping up infrastructure for demand in cities and not so much focus on getting broadband to few rural areas.
31. Maybe wireline Providers could partner with fixed wireless Providers to provide fiber to the fixed wireless towers. Win-Win situation.
32. TVS leases fiber to Appalachian Wireless and Time Warner.
33. If they can't get access to certain areas, then they will work with other Providers to provide BB access.

Baker (Bill Bates) Infrastructure/Providers Breakout Notes:

Participation in the breakout session was for Providers, ADD business contacts and Stakeholder/citizens. Those who participated had interest in broadband access and availability for the ADD area of focus. Several participants shared specific Provider or service-area inputs with the group that added to our regional understanding and contributed to a better understanding of the underline business of broadband – the current-state of service availability & impediments in rural areas of the ADD, and Provider residential/business criteria for considering service area expansion and how decisions are made.

NOTE: Additional inputs/ideas that relate to this session have been added from other sources to build on our knowledge and project experiences.

Valuable Criteria and Attributes for Providers Considering the Addition of New Service Expansion

- Population information at the county and local level
- Broadband subscriber **density** in area – Locating and mapping *Institutional, *CAI's, *Residential, *Business, *Gov. customers . . .
  (* KY addressing or photogrammetry data may help improve information for the Region and speed time-to-info.)
- Geography / Topology
- *Middle-mile Info,   *Head-end/Hub Location Points
- Providers presently operating in the area or in the region (competitive environment)
- Specific business locations (Primary? Secondary? Near Major State Roadways?)
- Business Types: *Commercial(Larger), *Small Business, *At-Home Business
- Network considerations for Providers / Criteria for Households(H) & Business(B):
  - Capacity
  - Speed
  - Cost (H)
  - Latency
  - Service Redundancy (B)
  - Service Quality
  - "Enterprise Class" Service (B)
  - Symmetric (B)
- Technology types in the area

- ➢ Fiber network expansion has more limiting factors -- Cost/Timing
- ➢ Fixed-Wireless technology is a faster way to bring service in underserved areas
- "Vertical Assets" – Existing towers or buildings where wireless or fixed-wireless equipment may   be deployed to reach new customers,
- Land ownership, parcel boundary, business zoning or districts, ROW access -- location data/info
- Private-sector towers --*Co-location towers expensive,*Interference with cell antenna,
- Public/Muni towers or water tanks* -- Does muni-owned infrastructure have specific business and contract terms? Document business processes and contract terms.
- Pole access -- *Pole owner, *Pole Type, *Attachment capacity, *Cost, *Permitting/Licensing process, *Speed-of-attachment (bureaucracy)
- Understanding the "partnership potential" of an area – <u>Facilitating</u> the partnering between local governments, institutions or Providers:
  - ➢ Connecting big Providers w/middle-mile to smaller providers to reach rural HH
  - ➢ Connecting one Provider w/technology to another Provider to extend service areas
  - ➢ Building off one Provider's connection to a State Park/Gov. Facility to reach a local community nearby with eager residential and Small Business customers
  - ➢ Leveraging access to government funding sources by ADD to incentivize local Provider build-out (Grants, FedGov Loan Guarantees, State or Regional $$$, Private Equity)
  - ➢ Acting as an "honest broker" or "matchmaker" between owners of "pipeline" and "access"
  - ➢ Identifying key businesses as "anchor" points as leverage points for surround HH availability
  - ➢ Brokering relationships between wireline and fixed-wireless providers for backhaul capacity and to reach unserved/under-served customer areas
- Costs of customer acquisition – equipment, maintenance, installation
- Contracts / No-Contracts
- Government rules/requirements/regulations/constraints –
  - ➢ Thinking more in a broadband-centric way…
  - ➢ Muni/County/Regional: Established department(s)? Points-of-Contact?
  - ➢ Business "guidelines" and processes: documented? in place?
  - ➢ RFI / RFP: Value-based? Cost-based? Criteria defined? Is the decision/evaluation process defined, open, and fair (People/Committee/Processes)?
- Group sees value in more/better/detailed/defined information as a means of better engagement -- attracting Providers and/or developing different business strategies for broadband access and availability
- Define and develop a "kit" of information with resources specific to broadband -- defined technical service levels and requirements to make it easier for Providers to understand area business needs and for the community to proactively take the lead on solving the problem
- Plan should also factor in maintaining/updating info and expanding it to enhance broadband success overtime,

- Complementing efforts to contribute to the regional plan -- Demand Aggregation, Business Surveys, CAI identification & inventory, Wi-Fi Hot-Spot strategies
- Connected to all the above, define people/process owners to build program capacity for sustaining ongoing efforts to enable a sustainable effort over time